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09/678,804	10/04/2000	Peter Terence Roux	113183.100	6349

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EXAMINER

CHEN, SHIN HON

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/678,804

Applicant(s)

ROUX ET AL.

Examiner

Shin-Hon Chen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

1. Claims 1-80 have been examined.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5, 7, 25, 27, 45, 47, 59, and 61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not disclose Class 3 IP address.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-9, 27-29, 47, and 61 recite the limitation "the secure server" in the claims.

There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6, 10, 11, 21, 26, 30, 31, 41, 46, 48, 55, 60, 62, 69, 70, 74, 75, 79, and 80 are rejected under 35 U.S.C. 102(b) as being anticipated by Nieminen et al. European Pat. No. 0924630 (hereinafter Nieminen).

8. As per claim 1 and 21, Nieminen discloses a secure communication method, comprising generating an Internet Protocol request from a client apparatus destined for a target server (Nieminen: [0005]); receiving the Internet Protocol request at an intermediate server (Nieminen: [0005]-[0006]); sending an Internet Protocol request for authentication information from the intermediate server to the client apparatus (Nieminen: [0022]-[0023]); sending the requested authentication information from the client apparatus to the intermediate server (Nieminen: [0024]); performing a validation check on the authentication information (Nieminen: [0024]); and transparently passing on the Internet Protocol request from the client apparatus to the target server and returning data from the target server to the client apparatus dependent upon the outcome of the validation (Nieminen: [0024]).

9. As per claim 41, 55 and 80, Nieminen discloses a server apparatus for providing communication over a communications network using Internet Protocol, to a target server from a client apparatus (Nieminen: [0005]-[0006]), the server apparatus comprising: an interface for connecting the client apparatus over the network for receiving an Internet Protocol request from the client: apparatus destined for the target server (Nieminen: [0005]-[0006] and [0022]-[0023]), for sending a request for authentication information to the client apparatus (Nieminen: [0005]-

[0006] and [0022]-[0023]), and for receiving the requested authentication information (Nieminen: [0005]-[0006] and [0022]-[0023]); validation means for performing a validation process for the authentication information (Nieminen: [0024]); and routing means for passing on the Internet Protocol request from the client apparatus to the target server and returning data from the target server to the client apparatus dependent upon the outcome of the validation process (Nieminen: [0024]).

10. As per claim 6, 26, 46, and 60, Nieminen discloses a secure communications method according to claims 1, 21, 41, and 55 respectively. Nieminen further discloses wherein the validation is performed at a validation server upon a validation request from the intermediate server (Nieminen: [0022]-[0023]).

11. As per claim 10 and 30, Nieminen discloses a secure communication method according to claims 1 and 21 respectively. Nieminen further discloses wherein the Internet Protocol request is generated with the domain name given for the target server, and the domain name is converted to the Internet Protocol address of the intermediate server by a Domain Name Server (Nieminen: [0021]).

12. As per claim 11, 31, 48, and 62, Nieminen discloses a secure communication method according to claims 10, 30, 41, and 55 respectively. Nieminen further discloses wherein the Internet Protocol address of the intermediate server is a class A or B address (Nieminen: [0021]).

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13. As per claim 69, Nieminen discloses a security server for providing secure access to a target server by a client over an Internet Protocol network, the server comprising: an Internet Protocol interface for connection to the client over said network (Nieminen: [0005]-[0006]); an interface for connection to said target server (Nieminen: [0005]-[0006] and [0022]-[0023]); program memory for storing program code for controlling a processor (Nieminen: [0021]-[0023]: browser); and a processor for implementing the stored program code, to control the interface (Nieminen: [0021]-[0023]: browser); wherein the program code comprises code to control the processor to: receive an Internet Protocol request from the client destined for the target server (Nieminen: [0021]-[0023]); send an Internet Protocol request for authentication information to the client (Nieminen: [0021]-[0023]); receive the requested authentication information (Nieminen: [0024]); perform a validation process for the authentication information; and pass on the Internet Protocol request from the client to the target server and return data from the target server to the client dependent upon the outcome of the validation process (Nieminen: [0024]).

14. As per claim 70 and 75, Nieminen discloses a client apparatus for gaining a validated access to data at a target server over an Internet Protocol network, the client apparatus comprising: an interface to the Internet Protocol network for sending an Internet Protocol request destined for the target server (Nieminen: [0005]-[0006]), for receiving an Internet Protocol request for authentication information from a security server (Nieminen: [0021]-[0023]), and for sending the requested authentication information to the security server using the Internet Protocol (Nieminen: [0021]-[0024]); and authentication means for generating the authentication

information; wherein the interface is arranged to receive data from the target server if authentication of the authentication information is successful (Nieminen: [0024]).

15. As per claim 74 and 79, Nieminen discloses a client apparatus according to claims 70 and 75 respectively. Nieminen further discloses the apparatus including an application for generating the Internet Protocol request and for using received data, wherein the interface includes means for monitoring and modifying Internet Protocol packets passing between the Internet Protocol network and the application (Nieminen: [0021]-[0024]).

### ***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2, 22, 42, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Cromer et al. U.S. Pat. No. 6567920 (hereinafter Cromer).

18. As per claim 2, 22, 42, and 56, Nieminen discloses secure communication method according to claims 1, 21, 41, and 55 respectively. Nieminen does not explicitly disclose wherein the received Internet Protocol request is acknowledged by the intermediate server to the client apparatus, the client apparatus responds with an acknowledgement including an identifier that the client apparatus may be authorized to access the target server, the request for authentication

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information is only sent when the identifier is received by the intermediate server, and a default response is sent by the intermediate server to the client apparatus if the identifier is not received by the intermediate server. However, Cromer discloses the authentication/log-in process is not started unless an identifier from the client apparatus is received (Cromer: column 2 lines 13-32). It would have been obvious to one having ordinary skill in the art to first check the identifier of the device prior to authentication process to increase the security of the system. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Cromer within the system of Nieminen because it increases the security of the authentication process.

19. Claims 3, 4, 23, 24, 43, 44, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Cromer and further in view of Guedalia et al. U.S. Pat. No. 6148333 (hereinafter Guedalia).

20. As per claim 3, 23, 43, and 57, Nieminen as modified discloses a secure communication method according to claims 2, 22, 42, and 56 respectively. Nieminen as modified does not explicitly disclose wherein the default response is a message that data requested by the Internet Protocol request was not found. However, Guedalia discloses that limitation (Guedalia: column 10 line 48 – column 11 line 6). It would have been obvious to one having ordinary skill in the art to combine the teachings of Guedalia within the combination of Nieminen-Cromer because it is well known in the art to return a default message when process is not successful.



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21. As per claim 4, 24, 44, and 58, Nieminen as modified discloses a secure communication method according to claims 2, 22, 42, and 56 respectively. Nieminen as modified does not explicitly disclose wherein the default response is default data. However, Guedalia discloses that limitation (Guedalia: column 10 line 48 – column 11 line 6). It would have been obvious to one having ordinary skill in the art to combine the teachings of Guedalia within the combination of Nieminen-Cromer because it is well known in the art to return a default data when process is not successful.

22. Claims 5, 7, 8, 14, 25, 27, 28, 34, 45, 47, 59, 61, 73, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Baize U.S. Pat. No. 6317838 (hereinafter Baize).

23. As per claim 5, 25, 45, and 59, Nieminen discloses a secure communication method according to claims 1, 21, 41, and 55 respectively. Nieminen further discloses wherein the target server has a class 3 Internet Protocol address and Internet Protocol communication between the intermediate server and the target server is over a local area network (Nieminen: [0021]). Alternatively, Baize discloses that limitation (Baize: column 5 lines 12-65 and figure 1). It is well known in the art to use proxy/firewall to intercept the request and forward it to target server through LAN. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Baize in view of Nieminen.

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24. As per claim 7, 27, 47, and 61, Nieminen discloses a secure communication method according to claims 6, 26, 46, and 60 respectively. Nieminen does not explicitly disclose wherein the secure server has a class 3 Internet Protocol address, and Internet Protocol communication between the intermediate server and the secure server is over a local area network. However, Baize discloses that limitation (Baize: figure 1 and column 5 lines 12-65). It is well known in the art to use security server within an intranet to protect resources from intrusion by outside sources. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Baize within the system of Nieminen because it increases security by avoiding secure server from being tampered directly from outside sources.

25. As per claim 8 and 28, Nieminen discloses a secure communication method according to claims 6 and 26 respectively. Nieminen does not explicitly disclose wherein the secure server includes a database of authorized users, for the performance of the validation. However, Baize discloses that limitation (Baize: figure 1 and column 5 lines 12-65). It is well known in the art to authenticate users based on information stored in a database. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Baize within the system of Nieminen.

26. As per claim 14, 34, 73, and 78, Nieminen discloses a secure communication method according to claims 1, 21, 70, and 75 respectively. Nieminen does not explicitly disclose wherein a user of the client apparatus enters a username and password and the authentication information

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includes the username and password. However, Baize discloses that limitation (Baize: column 5 lines 43-48). Same rationale applies here as above in rejecting claims 8 and 28.

27. Claims 9 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Baize and further in view of Babcock, Jr. U.S. Pat. No. 6249790 (hereinafter Babcock) and further in view of Miranda et al. U.S. Pat. No. 6523043 (hereinafter Miranda).

28. As per claim 9 and 29, Nieminen as modified discloses a secure communication method according to claims 8 and 28 respectively. Nieminen as modified does not explicitly disclose wherein the secure server also includes a potential users database if the validation procedure is unsuccessful the received authentication information is entered in the potential users database, and an administrator can transfer the authentication information for a user from the potential users database to the valid users database. However, Babcock discloses a potential users database for storing information regarding users who fails validation procedure (Babcock: column 3 lines 36-67). It would have been obvious to one having ordinary skill in the art to store potential users' information into a database to create more business opportunities in the future. Nieminen as modified does not explicitly disclose the administrator can transfer the authentication information for a user from the potential users database to the valid users database. However, Miranda discloses the administrator can add, change, and edit users' information (Miranda: column 4 lines 12-26). It would have been obvious to one having ordinary skill in the art to combine the teachings of Miranda within the combination of Nieminen-Baize-Babcock because

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it is well known in the art to transfer information from one database to another when the status of user has changed.

29. Claims 12, 13, 32, 33, 71, 72, 76, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Holmes U.S. Pat. No. 5875395 (hereinafter Holmes).

30. As per claim 12, 32, 71, and 76, Nieminen discloses a secure communications method according to claims 1, 21, 70, and 75 respectively. Nieminen does not explicitly disclose wherein the authentication information includes client apparatus information uniquely identifying hardware and/or software of the client apparatus. However, Holmes discloses that limitation (Holmes: column 1 lines 51- column 2 line 20). It is well known in the art to use hardware identifier for authentication purpose. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Holmes within the system of Nieminen.

31. As per claim 13, 33, 72, and 77, Nieminen discloses a secure method according to claims 1, 21, 70, and 75 respectively. Nieminen does not explicitly disclose wherein the authentication information includes an electronically generated serial number. However, Holmes discloses that limitation (Holmes: column 1 lines 51 – column 2 line 20). Same rationale applies here as above in rejecting claims 12 and 32.

32. Claims 15-17, 35-37, 49-51, and 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Guedalia.

33. As per claim 15, 35, 49, and 63, Nieminen discloses a secure communication method according to claims 1, 21, 41, and 55. Nieminen does not explicitly disclose wherein if the validation procedure fails a default response is sent to the client apparatus by the intermediate server. However, Guedalia discloses that limitation (Guedalia: column 10 lines 48 – column 11 line 6). It would have been obvious to one having ordinary skill in the art to have intermediate server send response to client when authentication fails. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Guedalia within the system of Nieminen because it is well known in the art to return a default message when process is not successful.

34. As per claim 16, 36, 51, and 65, Nieminen discloses a secure communication method according to claims 14, 35, 49, and 63 respectively. Nieminen does not explicitly disclose wherein the default response is default data. However, Guedalia discloses that limitation (Guedalia: column 10 lines 48 – column 11 line 6). Same rationale applies as above in rejecting claims 15 and 35.

35. As per claim 17, 37, 50, and 64, Nieminen as modified discloses a secure communication method according to claims 15, 35, 49, and 63 respectively. Nieminen as modified further discloses wherein the default response is a message that data requested by the Internet Protocol request was not found or available or that access is denied (Guedalia: column 10 line 48 – column 11 line 6).

36. Claims 18, 38, 52, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Edwards et al. U.S. Pat. No. 6594686 (hereinafter Edwards).

37. As per claim 18, 38, 52, and 66, Nieminen discloses a secure communication method according to claims 1, 21, 41, and 55 respectively. Nieminen does not explicitly disclose wherein if no authentication information is received within a predetermined time period by the intermediate server from the client apparatus, a default response is sent to the client apparatus by the intermediate server. However, Edwards discloses sending time-out response and default action is taken when no response is received from client (Edwards: column 8 lines 27-37). It would have been obvious to one having ordinary skill in the art to send default response to the client by the intermediate server when a predetermined time has elapsed and no response is received. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Edwards within the system of Nieminen because it increases the efficiency of the system by assume default process between two nodes when no information is being supplied.

38. Claims 19, 20, 39, 40, 53, 54, 67, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieminen in view of Edwards and further in view of Guedalia.

39. As per claim 19, 39, 53, and 67, Nieminen as modified discloses a secure communication method according to claims 18, 38, 52, and 66 respectively. Nieminen as modified does not

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explicitly disclose wherein the default response is a message that data requested by the Internet Protocol request was not found or available or that access is denied. However, Guedalia discloses that limitation (Guedalia: column 10 lines 48 – 63). It would have been obvious to one having ordinary skill in the art to combine the teachings of Guedalia within the combination of Nieminen-Edwards because it is well known in the art to return a default message when process is not successful.

40. As per claim 20, 40, 54, and 68, Nieminen as modified discloses a secure communication method according to claims 18, 38, 52, and 66 respectively. Nieminen as modified does not explicitly disclose wherein the default response is default data. However, Guedalia discloses that limitation (Guedalia: column 10 lines 48 – column 11 line 6). Same rationale applies here as above in rejecting claims 19 and 39.

### ***Conclusion***

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grantges, Jr. U.S. Pat. No. 6324348 discloses secure gateway having user identification and password authentication and intermediate server that intercept message request.

Clark et al. U.S. Pat. No. 6442588 discloses method of administering a dynamic filtering firewall.

Lim U.S. Pat. No. 6728884 discloses integrating heterogeneous authentication and authorization mechanisms into an application access control system.

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Delph U.S. Pat. No. 6356934 discloses intermediate server having control program for storing content accessed during browsing sessions and playback program for asynchronously replaying browsing session.

Dynarski U.S. Pat. No. 6466571 discloses radius-based mobile internet protocol address to mobile identification number or Electronic Serial Number mapping for wireless communication.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (703) 305-8654. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen  
Examiner  
Art Unit 2131

SC

  
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